

# Expression of miR-22 and miR-150 in type 1 diabetes mellitus: Possible relationship with autoimmunity and clinical characteristics

## Expresión de miR-22 y miR-150 en diabetes mellitus tipo 1: posible asociación con autoinmunidad y características clínicas

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© 2016 Elsevier España, S.L.U. Background and objective Type 1 diabetes (T1D) is an autoimmune disease of complex aetiology. Several microRNAs (miR) have been linked to the pathogenesis of autoimmune diseases. To analyze the possible association of miR-22 and miR-150 with autoimmunity and clinical severity of T1D. Patients and methods The study was performed in peripheral blood mononuclear cells of 20 patients with T1D and 20 control subjects. The expression of miR-22 and miR-150 was performed in peripheral blood mononuclear cells using TaqMan probes to different glucose concentrations (baseline, 11 mm, 25 mm). Results Our results suggest that the expression of miR-22 is increased in T1D patients compared to the controls. This effect was observed in baseline glucose conditions and decreased in 11 and 25 mM of glucose. The expression of miR-150 was lower in T1D patients versus the controls. There was no correlation between the autoimmune profile and the two studied miRNAs. miR-22 (basel